Duke Street Traffic Mitigation Pilot - FAQs

What is the purpose of this pilot?
Through numerous engagement opportunities, the community has made it clear that regional cut-through traffic on local streets impacts quality of life. The purpose of this pilot is to test signal timing changes to make it faster for cut-through traffic to use major roadways instead of local streets.

What changes are being made?
Signal timing along Quaker Lane and Duke Street is being changed to provide additional green time. Side Streets such as West Taylor Run Parkway and Cambridge Road will have longer red lights.

If I live in the neighborhood, how might I be impacted?
If you are trying to leave the neighborhood between 4 and 7pm to access Duke Street, you will likely have longer wait times to get onto Duke Street. Initially, there could be longer queues on the side streets until people shift their behavior.

What is the timeframe of the pilot?
The pilot will run from on weekdays from 4-7p.m. January 3 to March 31, 2022.

How will the City evaluate traffic conditions?
The City will use the StreetLight Data, Inc. platform to analyze before and after travel times, traffic volumes and travel routes to determine if travel patterns shifted due to the signal timing changes. The data collection and streets being monitored can be viewed here.

How will the City measure success?
Staff is currently working with civic association leadership to determine the measures of success.

Are the civic associations involved?
Yes- many civic associations in the area and their leadership have partnered with the City design the pilot, including the time of day and duration of the pilot, streets to be evaluated, and criteria and measures of success. Staff presented at community meetings. See the video here.

Will the residents who use the service road to access their homes between West Taylor Run Parkway and Cambridge Road be impacted?
Possibly. There could be longer wait times to return or leave home between 4 and 7pm. However, with longer green times for the service road, there might not be an impact. The evaluation plan includes travel times to and from these locations, and staff will evaluate the impact of the changes on these residents.

How will this impact my commute for the first few weeks?
Coming from any of the side streets along Duke Street, the travel time could take two to three times longer with more delays and longer back-up. However, drivers along Quaker Lane and Duke Street will experience a 20% decrease in travel time with fewer stopping time from each traffic light and shorter back-up. The goal is that eventually, drivers will shift from the neighborhood streets onto the arterials.

How will this impact my commute after the first few weeks?

Coming from any of the side streets along Duke Street, the travel time will still be longer, however, we anticipate navigational apps will direct commuters to stay on Quaker Lane and Duke Street, which will lead to a decrease in delay compared to the initial start of the pilot. Although it is anticipated increase in volume on Duke Street, drivers will still experience a decrease in travel time as compared to pre-pilot travel times.

Which side streets along Duke Street will experience the most amount of travel time increase?
Based off of demand, we anticipate West Taylor Run Parkway, Cambridge Road, and both entrances to the Alexandria Commons Shopping Center to experience significant travel time increases throughout the pilot duration. However, all side streets along Duke Street will be allotted similar green times during the pilot.

Will my travel time increase entering the neighborhood from Duke Street?
Due to the increase in green time to the through movement along Duke Street, the left turn lanes along Duke Street is anticipated to a slight increase in delay and back-up. However, the signal will be timed where the back-up within the left turn lanes do not spill into the through lanes.